

Practice: 516 - Livestock Pipeline**Scenario: #1 - Buried Pipeline, all diameters****Scenario Description:**

Description: Buried installation of PVC or HDPE (Iron Pipe Size & Tubing) pipeline. Scenario is for 1000 feet of 1½-inch, Sch 40 PVC, ASTM D1785 (0.52#/ft) or (SIDR-PR) ASTM D2239 (PE 3408) HDPE pipe weighs 0.43 lb/ft. Appurtenances include: couplings, fittings, anchors, thrust blocks, gate valves (2), air release valves (2), drain valve (1), and pressure relief valve (1), and are included in the cost of pipe material (additional 5% of pipe material quantity). Revegetation is not included.

Resource Concerns: Inadequate Livestock Water, Inefficient Energy Use.

Associated Practices: Critical Area Planting (342), Pond (378), Pumping Plant (533), Watering Facility (614), and Water Harvesting Catchment (636).

Before Situation:

Water supplies need to be conveyed through pipelines for use by livestock or wildlife.

After Situation:

Pipeline(s) convey and/or distribute water to storage and/or watering facilities, for use by livestock or wildlife.

Scenario Feature Measure: Length of pipe

Scenario Unit: Linear Foot

Scenario Typical Size: 1,000

Scenario Cost: \$2,688.68

Scenario Cost/Unit: \$2.69

Cost Details (by category):

| Component Name | ID | Component Description | Unit | Price (\$/unit) | Quantity | Cost |
|--------------------------------|------|--|------|-----------------|----------|------------|
| Equipment/Installation | | | | | | |
| Trenching, Earth, 12" x 48" | 53 | Trenching, earth, 12" wide x 48" depth, includes equipment and labor for trenching and backfilling | Foot | \$1.11 | 1000 | \$1,110.00 |
| Labor | | | | | | |
| General Labor | 231 | Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc. | Hour | \$18.79 | 12 | \$225.48 |
| Materials | | | | | | |
| Pipe, PVC, 1 ½", SCH 40 | 975 | Materials: - 1 1/2" - PVC - SCH 40 - ASTM D1785 | Foot | \$1.04 | 1050 | \$1,092.00 |
| Mobilization | | | | | | |
| Mobilization, medium equipment | 1139 | Equipment with 70-150 HP or typical weights between 14,000 and 30,000 pounds. | Each | \$261.20 | 1 | \$261.20 |